

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2018-0029; Product Identifier 2015-NM-132-AD; Amendment

39-19179; AD 2018-03-06]

**RIN 2120-AA64** 

Airworthiness Directives; Airbus Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are superseding Airworthiness Directive (AD) 2015-02-18, which applied to all Airbus Model A330-201, -202, -203, -301, -302, and -303 airplanes. AD 2015-02-18 required a one-time ultrasonic inspection for fractures of all aft mount-pylon bolts of each engine. This new AD was prompted by the failure of a bolt on the aft engine mount upper beam, which was found to be caused by inappropriate in-production upper beam installation. This AD requires contacting the FAA to obtain instructions for addressing the unsafe condition on these products, and doing the actions specified in those instructions. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
   West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE.,
   Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0029; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1138; fax: 425-227-1149.

# SUPPLEMENTARY INFORMATION:

#### **Discussion**

We issued AD 2015-02-18, Amendment 39-18085 (80 FR 5020, January 30, 2015) ("AD 2015-02-18"), which applied to all Airbus Model A330-201, -202, -203, -301, -302, and -303 airplanes. AD 2015-02-18 was prompted by a report of one bolt on the aft engine mount upper beam found totally broken. AD 2015-02-18 required a one-time ultrasonic inspection for fractures of all aft mount-pylon bolts of each engine. We issued AD 2015-02-18 to detect and correct fracture of the aft mount-pylon bolts, which could result in failure of the engine mount and consequent detachment of the engine.

Since we issued AD 2015-02-18, further investigation showed that the pylon bolt failure was caused by inappropriate upper beam installation during production. We have determined that repetitive inspections are necessary to address the unsafe condition.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2015-0126, dated July 1, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Airbus Model A330-200 and -300 series airplanes. The MCAI states:

During a scheduled replacement of a CF6-80E1 engine on an A330 aeroplane, a bolt on the aft engine mount upper beam was found sheared. The affected bolt is one out of four bolts that attach the upper beam to the pylon.

Investigation results revealed an unusual contact with the counter-bore edge of the beam which induced a significant groove on the bolt during its installation in production. It is suspected that the induced groove led to a fatigue crack initiation and subsequent quick propagation leading to the complete fracture of the bolt. In case of multiple bolt fractures, the remaining bolts would be insufficient to sustain the residual fatigue and limit loads.

This condition, if not detected and corrected, could lead, in case of multiple bolt fracture, to loss of an engine mount structural integrity and possible in-flight engine detachment, resulting in reduced control of the aeroplane and/or injury to persons on the ground.

To address this potential unsafe condition, EASA issued AD 2013-0094 to require a one-time ultrasonic (US) inspection of the four aft mount-pylon bolts of both engines to detect sheared bolts and, depending on findings, accomplishment of applicable corrective actions.

Since EASA AD 2013-0094 was issued, further investigation results revealed that the pylon bolt failure was caused by inappropriate upper beam installation during production. An abnormal bending load applied on the bolt during installation of the upper beam could have increased the stress close to or beyond the limit strength, high enough to fracture the bolt.

Prompted by these findings, Airbus issued Service Bulletin (SB) A330-71-3031 providing instructions for repetitive inspections and the applicable corrective actions.

For the reasons described above, this [EASA] AD, which supersedes EASA AD 2013-0094, requires repetitive US inspections of the aft mount-pylons bolts of each engine and, depending on findings, corrective actions.

You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0029.

### FAA's Determination and Requirements of this AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### FAA's Determination of the Effective Date

Since there are currently no domestic operators of this product, we find good cause that notice and opportunity for prior public comment are unnecessary. In addition, for the reason(s) stated above, we find that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2018-0029; Product Identifier 2015-NM-132-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Costs of Compliance**

Currently, there are no affected U.S.-registered airplanes. This AD requires contacting the FAA to obtain instructions for addressing the unsafe condition, and doing the actions specified in those instructions. Based on the actions specified in the MCAI AD, we are providing the following cost estimates for an affected airplane that is placed on the U.S. Register in the future:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product
Inspections (new action)	8 work-hours X \$85 per hour = \$680 per inspection cycle	\$0	\$680 per inspection cycle

We estimate the following costs to do any necessary on-condition repairs that would be required based on the results of the required actions:

#### **On-condition costs**

Action	Labor cost	Parts cost	Cost per product
Repair (new action)	Up to 337 work- hours X \$85 per hour = \$28,645	1	Up to \$28,645

<sup>&</sup>lt;sup>1</sup> We have received no definitive data that would enable us to provide parts cost estimates for the oncondition actions specified in this AD.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2015-02-18, Amendment 39-18085 (80 FR 5020, January 30, 2015), and adding the following new AD:

**2018-03-06 Airbus:** Amendment 39-19179; Docket No. FAA-2018-0029; Product Identifier 2015-NM-132-AD.

#### (a) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

This AD replaces AD 2015-02-18, Amendment 39-18085 (80 FR 5020, January 30, 2015) ("AD 2015-02-18").

### (c) Applicability

This AD applies to Airbus Model A330-201, -202, -203, -301, -302, and -303 airplanes, certificated in any category, all manufacturer serial numbers, except those on which Airbus modification 203947 has been embodied in production.

### (d) Subject

Air Transport Association (ATA) of America Code 71, Powerplant.

#### (e) Reason

This AD was prompted by the failure of a bolt on the aft engine mount upper beam, which was found to be caused by inappropriate in-production upper beam installation. We are issuing this AD to detect and correct fracture of the aft mount-pylon bolts, which could result in loss of engine mount structural integrity, consequent detachment of the engine and reduced control of the airplane.

#### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

### (g) Required Action(s)

Within 30 days after the effective date of this AD, request instructions from the Manager, International Section, Transport Standards Branch, FAA, to address the unsafe condition specified in paragraph (e) of this AD; and accomplish the action(s) at the times specified in, and in accordance with, those instructions. Guidance can be found in Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) AD 2015-0126, dated July 1, 2015.

### (h) Alternative Methods of Compliance (AMOCs)

The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (i)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

### (i) Related Information

(1) Refer to MCAI EASA AD 2015-0126, dated July 1, 2015, for related information. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0029.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1138; fax: 425-227-1149.

# (j) Material Incorporated by Reference

None.

Issued in Renton, Washington, on January 25, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.
[FR Doc. 2018-02350 Filed: 2/6/2018 8:45 am; Publication Date: 2/7/2018]